REMARKS

The applicant appreciates the examiner's thorough examination of the subject application and request reexamination and reconsideration of the subject application in view of the preceding amendments and the following remarks.

Concerning items 1 - 10 of the subject action, the examiner rejects claims 1-7 and 13-18 under 35 USC §102(e), based on the teachings of Mano (U.S. Patent No. 6,012,151).

With respect to claim 1, applicants have amended claim 1 such that the plurality of processes include "at least one thread". Mano fails to disclose the element of assigning one of the plurality of ports to one of a plurality of processes that include at least one thread, as claimed by the applicant. Therefore, Mano is not a proper basis for a 35 USC §102(e) rejection as it does not disclose each and every element of the applicants' claimed invention. Accordingly applicants respectfully assert that claim 1 is allowable.

Specifically, Mano describes exchanging data among processors and input/output devices. In particular, the applicants direct the examiner's attention to Mano, col. 6, line 37 to col. 6, line 39. This passage discloses how a "processor 1 exchanges data with the input/output device 2 or with another processor (not shown) via the bus 3". Mano further discloses exchanging data among multiple processors and multiple input/output devices and not a plurality of processes that include at least one thread. In particular, referring to col. 27, line 1 to col. 27, line 2, Mano describes data exchanges within a distributed processing system that "includes signal processors 71-1-71-N, signal input/output devices 72-1-72-M, a bus 73 and signal input/output ports 74." (col. 27, lines 1-2).

In general a processor is logic circuitry that responds to and processes the basic instructions that drive a computer. Conversely, a thread is placeholder information associated with a single use of a program that can handle multiple concurrent users. From the program's perspective, a thread is the information needed to serve one individual user or a particular service request. Typically if multiple users are using the program or concurrent requests from other programs occur, a thread is created and maintained for each. Further, a thread provides the program with the capability to know which user is being served as the program is re-entered on

behalf of different users. Thus, while Mano exchanges data among processors and input/output devices, the reference does not disclose or suggest assigning one of a plurality of ports to one of a plurality of processes that include at least one thread to receive data as stated on amended claim 1. Accordingly, applicants respectfully asserts that amended claim 1 is allowable with respect to Mano.

With respect to claims 2-7, each of these claims depend (either directly or indirectly) on amended claim 1 (an allowable base claim). Accordingly, applicants respectfully assert that claims 2-7 are allowable with respect to Mano.

With respect to claim 13, similar to amended claim 1, applicants have amended claim 13 to include that the plurality of processes include "at least one thread". Accordingly, applicants respectfully assert that amended claim 13 is allowable with respect to Mano.

With respect to claims 14-18, each of these claims depend (either directly or indirectly) on amended claim 13 (an allowable base claim). Accordingly, applicants respectfully assert that claims 14-18 are allowable with respect to Mano.

Concerning items 11-17 of the subject action, the examiner rejects claims 8-12 under 35 USC §103(a), based on the teachings of Mano (U.S. Patent No. 6,012,151) in view of Latif (U.S. Patent No. 6,393,483). The examiner acknowledges that Mano fails to disclose data comprising packet data, or packet data comprising a network packet, or a network packet comprising an Ethernet packet, or a plurality of ports comprising a 10/100 Base T Ethernet port. The examiner further argues that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mano with the multi-port NIC receiving means of Latif because it provides increased load balancing capability.

With respect to claims 8-12, each of these claims depend (either directly or indirectly) on amended claim 1 (an allowable base claim) that was amended to include that the plurality of processes include "at least one thread".

Similar to Mano, the combination of Mano and Latif does not disclose or suggest the element of assigning one of the plurality of ports to one of the plurality of processes that include at least one thread of amended claim 1 and, therefore, is not a proper basis for a 35 USC §103(a) rejection. Accordingly applicants respectfully assert that claim 1 is allowable over the combination of Mano and Latif.

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   Directing the examiner's attention to Latif col. 5, line 10 to col. 5, line 13, Latif describes a multi-port network interface card (NIC) "well suited for server computer systems that are required to transfer large amounts of data over a network in response to numerous short data requests." A network interface card NIC is a computer circuit board or card that is installed in a computer so that it can be connected to a network. Personal computers and workstations on a local area network (LAN) typically contain a network interface card specifically designed for the LAN transmission technology, such as Ethernet or token ring. Also, network interface cards typically provide a dedicated, full-time connection to a network.

   Directing the examiner's attention to Latif col. 5, line 14 to col. 5, line 17, this passage disclosed that "Preferably, the multi-port NIC of the present invention has each of its ports linked to the network, hub, or switch, and each of its ports acts as an independent NIC having an associated bandwidth." Thus, while Latif describes linking ports of a multi-port NIC to networks, hubs, or swtiches, similar to Mano, Latif does not disclose or suggest assigning one of a plurality of ports to one of a plurality of processes that include at least one thread as stated in amended claim 1. The combination of Mano and Latif does not contain all of the elements of amended claim 1 and is not a proper basis for a 35 USC §103(a) rejection. Accordingly, applicants respectfully assert that claims 8-12 that depend (either directly or indirectly) on amended claim 1 are allowable with respect to the combination of Mano and Latif.

   Attached is a marked-up version of the changes being made by the current amendment.
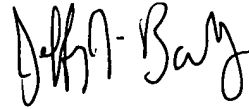
Applicant asks that all claims be allowed. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 10559-133001.

Respectfully submitted,

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Version with markings to show changes made

In the claims:

Claims 1 and 13 have been amended as follows:

1.   A method for receiving data from a plurality of ports for processing by a plurality of processes including at least one thread, comprising:

assigning one of the plurality of ports to one of the plurality of processes;

determining that additional data is available from the assigned port; and

awaiting notification by the one of the plurality of processes that processing of the additional data has been completed prior to re-assigning the port to one of the plurality of processes.

13.   An article comprising a computer-readable medium which stores computer-executable instructions for receiving data from a plurality of ports for processing by a plurality of processes including at least one thread, the instructions causing a computer to:

assign one of the plurality of ports to one of the plurality of processes;

determine that additional data is available from the one of the plurality of ports; and

await notification by the process that processing has been completed for the additional data prior to re-assigning the one of the plurality of ports to one of the plurality of processes.